

Application No. 10/736,865
Amendment dated February 20, 2006
Reply to Office Action dated October 18, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (canceled)

Claim 4 (currently amended): The motion detection system of claim [3] 39 wherein said second condition is not satisfied only when said first output signal exceeds said first threshold value beginning at a first time and said second output signal exceeds said second threshold value beginning at a second time and said first and second times are separated by no more than a predetermined time delay value.

Claim 5 (currently amended): The motion detection system of claim [1] 39 further comprising:

 a first high threshold comparator and a first low threshold comparator operatively disposed between said first sensor and said processor, said first high threshold comparator generating a first high threshold flag signal when said first output signal exceeds a first high threshold value, said first low threshold comparator generating a first low threshold flag signal when said first output signal exceeds a first low threshold value;

 a second high threshold comparator and a second low threshold comparator operatively disposed between said second sensor and said processor, said second high threshold comparator generating a second high threshold flag signal when said second output signal exceeds a second high threshold value, said second low threshold comparator generating a second low threshold flag signal when said second output signal exceeds a second low threshold value; and

 wherein said second condition is not satisfied when both said first output signal exceeds one of said first threshold values and said second output signal exceeds one of said second

Application No. 10/736,865
Amendment dated February 20, 2006
Reply to Office Action dated October 18, 2005

threshold values and said first output signal exceeds said one first threshold value beginning at a first time and said second output signal exceeds said one second threshold value beginning at a second time and said first and second times are separated by no more than a predetermined time delay value.

Claim 6 (original): The motion detection system of claim 5 wherein said one first threshold value and said one second threshold value are either both high threshold values or both low threshold values.

Claim 7 (original): The motion detection system of claim 5 wherein said comparators are all voltage comparators.

Claim 8 (original): The motion detection system of claim 5 wherein said predetermined time delay value is no greater than approximately 60 milliseconds.

Claim 9 (currently amended): The motion detection system of claim [1] 39 further comprising a filtering element disposed between said first sensor and said at least one detection zone wherein said filter inhibits the passage of light having predetermined wavelengths.

Claim 10 (original): The motion detection system of claim 9 wherein said filtering element is a pigmented fresnel lens.

Claim 11 (currently amended): The motion detection system of claim [1] 39 wherein there are a plurality of detection zones.

Claim 12 (currently amended): The motion detection system of claim [1] 39 wherein said first sensor is a pyro-electric sensor and said first range of wavelengths includes wavelengths of approximately 7 to 14 μ m and said second range of wavelengths has an upper limit less than 7 μ m and includes wavelengths greater than 400 nm.

Application No. 10/736,865
Amendment dated February 20, 2006
Reply to Office Action dated October 18, 2005

Claim 13 (currently amended): The motion detection system of claim [1] 39 wherein said first sensor is a pyro-electric sensor and said first range of wavelengths includes wavelengths of approximately 7 to 14 μ m and said second sensor is sensitive to at least a portion of visible light having wavelengths between 400 nm and 700 nm.

Claim 14 (currently amended): The motion detection system of claim [1] 39 wherein said first sensor is a pyro-electric sensor and said first range of wavelengths includes wavelengths of approximately 7 to 14 μ m and said second sensor is sensitive to near infrared light having a wavelength of approximately 1 μ m.

Claims 15-17 (canceled)

Claim 18 (currently amended): The method of claim [17] 40 wherein said predetermined time delay value is no greater than approximately 60 milliseconds.

Claim 19 (currently amended): The method of claim [17] 40 wherein a pyro-electric sensor sensitive to light that includes light having a wavelength within a range of approximately 7 to 14 μ m is used to sense infrared light emitted from the at least one detection zone.

Claim 20 (currently amended): The method of claim [19] 40 wherein a cadmium-sulfide photocell is used to sense visible light proximate the first position.

Claims 21-26 (canceled)

Claim 27 (currently amended): The motion detection system of claim [21] 41 wherein said first sensor is sensitive to a first range of wavelengths that includes wavelengths of approximately 7 to 14 μ m and said second sensor is sensitive to a second range of wavelengths that has an upper limit less than 7 μ m and includes wavelengths greater than 400 nm.

Claims 28-38 (canceled)

Application No. 10/736,865
Amendment dated February 20, 2006
Reply to Office Action dated October 18, 2005

Claim 39 (new): A motion detection system comprising:

a first sensor sensitive to light in a first range of wavelengths in at least one detection zone and generating a first output signal representative of the detected level of light in said first range;

a second sensor sensitive to light in a second range of wavelengths, different from said first range, and generating a second output signal representative of the detected level of light in said second range, said second sensor being positioned proximate said first sensor; and

a processor, said processor comparing said first output signal to a first threshold value and said second output signal to a second threshold value, said processor programmed to generate an alarm signal based upon said first and second output signals, whereby said alarm signal is generated when first and second conditions are satisfied, said first condition being satisfied when said first output signal exceeds said first threshold value, and said second condition being satisfied when said second output signal does not exceed said second threshold value.

Claim 40 (new): A method of detecting motion, said method comprising:

detecting motion in at least one detection zone by sensing, at a first position, infrared light emitted from at least one detection zone and generating a first signal based upon said sensed infrared light;

sensing visible light proximate said first position and generating a second signal based upon said sensed visible light;

comparing said first signal representative of said sensed infrared light to a first threshold value and comparing a said second signal representative of said sensed visible light to a second threshold value;

Application No. 10/736,865
Amendment dated February 20, 2006
Reply to Office Action dated October 18, 2005

determining if correlation exists by determining when the first signal exceeds the first threshold at a first time and when the second signal exceeds the second threshold at a second time and determining if the first and second times are separated by no more than a predetermined time delay value; and

generating a motion detection signal only when such correlation is not determined.

Claim 41 (new): A motion detection system comprising:

a first sensor capable of detecting light in both an infrared frequency range and a first visible frequency range;

a second sensor capable of detecting light in a second visible frequency range;

a processor in communication with both said first sensor and said second sensor, said processor able to sense a first threshold level of infrared light and a second threshold level of visible light, said processor configured to determine whether said first threshold level is a first predetermined amount greater than a baseline level of infrared light detected by said first sensor and whether said second threshold level is a second predetermined amount greater than a baseline level of visible light detected by said second sensor, said processor generating an alarm signal only if said first sensor detects said baseline level of infrared light exceeds said first threshold level of light occurring during a time period and said second sensor detects said baseline level of visible light being less than said second threshold level of light during said time period.